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OUT OF SIGHT, BUT NOT OUT OF MIND: REEVALUATING THE ROLE OF FEDERALISM IN ADEQUATELY REGULATING CONCENTRATED ANIMAL FEEDING OPERATIONS

MADHAVI KULKARNI*

INTRODUCTION

Every year, over nine billion land animals are killed in the United States to produce meat, dairy, and other animal products for consumers.¹ While tactful marketing and lobbying by large and powerful animal agriculture companies and trade associations continue to convince consumers of the idyllic, often pristine origins of their food, the reality could not be further from this facade.² Today, an estimated 99 percent of farm animals destined for consumption are raised in large-scale industrial animal agriculture operations, or factory farms.³ Concentrated animal feeding operations (“CAFOs”) are large scale factory farms where more than 1,000 animal units are confined in a small area of land for at least forty-five days.⁴ One animal unit is defined as 1,000 pounds of a live animal.⁵

Although CAFOs only account for about 5 percent of United States animal agriculture operations by number, they produce more than 50 percent of the animals that are slaughtered for food.⁶ CAFOs also produce

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¹ *Factory Farms*, WELL-FED WORLD, <https://awfw.org/factory-farms/> [https://perma.cc/9G4D-2GDW] (last visited Nov. 12, 2019).

² See *Inhumane Practices on Factory Farms*, ANIMAL WELFARE INST., <https://awionline.org/content/inhumane-practices-factory-farms> [https://perma.cc/XZ9Y-M2LP] (last visited Nov. 12, 2019) (describing the inhumane methods of rearing farm animals on industrial factory farms).

³ *Factory farming: assessing investment risks*, FARM ANIMAL INV. RISK & RETURN, <https://www.fairr.org/article/factory-farming-assessing-investment-risks/> [https://perma.cc/45YN-ZNUB] (last visited Nov. 12, 2019).

⁴ *Animal Feeding Operations*, NAT'L RESOURCES CONSERVATION SERV., <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/livestock/afo/> [https://perma.cc/LMU2-6M45] (last visited Nov. 12, 2019).

⁵ *Id.*

⁶ DOUG GURIAN-SHERMAN, UNION OF CONCERNED SCIENTISTS, *CAFOs UNCOVERED: THE*

300 million tons of animal manure per year.⁷ This accounts for approximately 65 percent of the total manure produced by United States animal agriculture and is more than double the amount generated by the human population in the United States.⁸ Due to the sheer amount of manure produced on small areas of land, the runoff of CAFO waste into surface and groundwater is common.⁹ Additionally, CAFOs emit pollutants such as ammonia, hydrogen sulfide, particulate matter, volatile organic compounds (“VOCs”), and nitrous oxide into the air.¹⁰ Therefore, animal agriculture practices in the United States, and CAFOs specifically, implicate the question of whether or not environmental laws are adequate in regulating the activities of CAFOs.

This Note will argue that current state and federal laws are sorely inadequate in regulating CAFOs and demonstrate that the government entities charged with enforcing what few laws currently exist have had little success in satisfactorily performing their roles.¹¹ To protect the environment from the widespread and predictably devastating effects of CAFOs on the land, water, and air resources of the United States, it is necessary to rethink the role of federalism as it relates to environmental law.¹² Given the dearth of environmental statutes and regulations governing the operation of CAFOs and the strong lobbying powers that have led to the externalization of costs,¹³ a reexamination of the relationship between the federal government and the states, as well as the distribution of the power to enact and enforce environmental regulations is necessary. As they stand, many major federal environmental protection statutes, including the Clean Water Act; the Clean Air Act; and the Comprehensive Environmental Response, Compensation, and Liability Act fail to adequately regulate CAFOs, and sometimes even exclude CAFOs from regulation.¹⁴

Since agriculture is one of the biggest sources of water pollution in the country,¹⁵ the practice of deregulating large agricultural farms such

UNTOLD COSTS OF CONFINED ANIMAL FEEDING OPERATIONS 2 (2008), https://www.organicconsumers.org/sites/default/files/cafos_uncovered.pdf [<https://perma.cc/6NGP-BYSW>].

⁷ *Id.*

⁸ *Id.*

⁹ *Id.* at 3.

¹⁰ *CAFO regulations*, WHAT WORKS FOR HEALTH—POLICIES & PROGRAMS TO IMPROVE WISCONSIN'S HEALTH, <http://whatworksforhealth.wisc.edu/program.php?t1=109&t2=7&t3=129&id=650> [<https://perma.cc/GR97-BUZE>] (last updated Apr. 21, 2017).

¹¹ *See infra* Part IV.

¹² *Id.*

¹³ *See infra* Parts I & II.

¹⁴ *See infra* Section I.A.

¹⁵ *The Main Causes of Water Pollution in the U.S.*, ARCADIA POWER BLOG, <https://blog.ar>

as CAFOs poses pressing environmental threats. In the absence of federal regulations, states have attempted to enact their own laws to regulate CAFOs and mitigate their harmful effects.¹⁶ While these efforts are a step in the right direction, more widespread adoption of state laws and more consistent enforcement are necessary for these efforts to make a lasting impact. This is especially true in the face of barriers such as negative market externalities, often in the form of tax incentives for big agriculture.¹⁷

Both federal and state governments must begin to view CAFOs as a serious environmental threat and take action. First, the federal government, acting through the Environmental Protection Agency (“EPA”), should develop a system through which it regularly enforces existing environmental laws against CAFOs. To this end, this Note proposes a cross-regional accountability system and requirements for communication between the EPA and state agencies that regulate CAFOs. Turning to the states, this Note proposes a two-pronged revitalization program. The first prong is to work towards more consistent and targeted enforcement of federal statutes and regulations, subject to a cross-agency accountability system similar to the federal level. The second prong is the enactment of more stringent, uniform state regulations of CAFOs drawing inspiration from the states that have successfully enacted these types of regulations. The communication requirements for the EPA should also apply to state agencies. Bolstering the individual responsibilities of both the federal government and state governments, reanalyzing the relationship between the two, and shifting certain responsibilities from one to the other are necessary for the adequate regulation of CAFOs.

I. CURRENT LAWS GOVERNING CAFOs AND WHY CURRENT LEGISLATION IS INADEQUATE

A. *Federal Laws*

1. The Clean Water Act

The Clean Water Act (“CWA”) established the “basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.”¹⁸ The CWA established

cadiapower.com/main-causes-water-pollution-u-s/ [https://perma.cc/22KM-AHLU] (last visited Nov. 12, 2019).

¹⁶ See *infra* Section I.B.

¹⁷ See *infra* Section II.C.

¹⁸ *Summary of the Clean Water Act*, EPA, <https://www.epa.gov/laws-regulations/summary-clean-water-act> [https://perma.cc/7RPY-6J9D] (last updated Mar. 29, 2018).

the National Pollutant Discharge Elimination System (“NPDES”) permitting program.¹⁹ This program requires the acquisition of permits before dredged or fill material from point sources may be discharged into the navigable waters of the United States.²⁰ This permitting system is meant to ensure compliance with, and aid in, the enforcement of the CWA.²¹ The primary mechanism in the NPDES permit through which the EPA controls discharges of pollutants is establishing effluent limitations.²² Effluent limitations establish limits on the amount of hazardous pollutants that can be discharged into the navigable waters of the United States.²³ These limits are based on: (1) the technology available to control the pollutants and (2) the target water quality standards of a particular body of water.²⁴

While not all animal feeding operations are considered point sources for purposes of the CWA, point sources are specifically defined to include CAFOs.²⁵ Thus, any CAFO that discharges into a navigable water of the United States, which is defined broadly as a “water of the United States,”²⁶ is subject to all the NPDES permitting requirements. Permit applications for CAFOs require, among other things, information about the “estimated amounts of manure, litter, and process wastewater generated” and nutrient management plans (“NMP”).²⁷ The NMP must contain best management practices (“BMP”), which are “schedules of activities, prohibitions of practices, maintenance procedures, and other management practices [that] prevent or reduce the pollution of waters of the United States.”²⁸ Other requirements of the NMP include, but are not limited to, adequate storage and testing of manure and proper management of dead animals.²⁹

Although the EPA is the chief regulator of the CWA, and therefore of NPDES permits, the agency has authorized forty-six states to implement

¹⁹ *NPDES Permit Basics*, EPA, <https://www.epa.gov/npdes/npdes-permit-basics> [https://perma.cc/H7SQ-6YNZ] (last updated July 25, 2018).

²⁰ *Clean Water Act (CWA) Compliance Monitoring*, EPA, <https://www.epa.gov/compliance/clean-water-act-cwa-compliance-monitoring> [https://perma.cc/5QD9-6FRD] (last updated Feb. 15, 2018).

²¹ *Id.*

²² *NPDES Permit Limits*, EPA, <https://www.epa.gov/npdes/npdes-permit-limits> [https://perma.cc/V4HL-6VBH] (last updated Nov. 29, 2016).

²³ *Id.*

²⁴ *Id.*

²⁵ 33 U.S.C. § 1362(14) (2008).

²⁶ § 1362(7).

²⁷ 40 C.F.R. § 122.21 (2018).

²⁸ § 122.2.

²⁹ § 122.42(e)(1).

their own NPDES permitting systems.³⁰ States who wish to administer their own NPDES permitting programs must submit several documents to the EPA, including a Memorandum of Agreement (“MOA”), which details the proposed state permitting program.³¹ The EPA must approve of the program before a state may administer NPDES permits.³²

2. The Comprehensive Environmental Response, Compensation, and Liability Act & the Emergency Planning and Community Right-to-Know Act

Both the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”) and the Emergency Planning and Community Right-to-Know Act (“EPCRA”) require individuals and businesses to report any release of hazardous substances within twenty-four hours of their release, if these substances meet or exceed reportable quantities.³³ This notification requirement is meant to alert federal, state, and local authorities of the need for an emergency response to the release of hazardous substances.³⁴

Until early 2018, the reporting of hazardous air emissions from animal waste that met or exceeded reportable quantities was required under CERCLA.³⁵ However, on March 23, 2018, the Fair Agricultural Reporting Method Act (“FARM Act”) was passed, which amended CERCLA provisions to exempt farms from reporting hazardous air emissions due to animal waste that would otherwise have met the standards for reporting.³⁶ Consequently, the EPA published a final rule on August 1, 2018, which revised the CERCLA reporting regulations, incorporating the FARM Act amendments.³⁷ Additionally, in November 2018, the EPA proposed an amendment to EPCRA to exempt farms from reporting any air emissions

³⁰ *About NPDES*, EPA, <https://www.epa.gov/npdes/about-npdes> [<https://perma.cc/JGM3-7HPM>] (last updated Nov. 29, 2016).

³¹ *NPDES State Program Information*, EPA, <https://www.epa.gov/npdes/npdes-state-program-information> [<https://perma.cc/7ADN-3S6L>] (last updated Dec. 11, 2018).

³² *Id.*

³³ *CERCLA and EPCRA Reporting Requirements for Air Releases of Hazardous Substances from Animal Waste at Farms*, EPA, <https://www.epa.gov/epcra/cercla-and-epcra-reporting-requirements-air-releases-hazardous-substances-animal-waste-farms> [<https://perma.cc/JGB2-HRFM>] (last updated Nov. 21, 2018).

³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.*

from animal waste.³⁸ The proposed rule sought to define the terms “animal waste” and “farm” in EPCRA regulations in the same way they are defined under CERCLA in order to homogenize which farms CERCLA and EPCRA exemptions would apply to.³⁹ This rule was finalized in June 2019.⁴⁰

3. The Clean Air Act

The Clean Air Act (“CAA”) regulates air emissions from stationary and mobile sources by setting National Ambient Air Quality Standards (“NAAQS”) for six principal pollutants, known as criteria pollutants.⁴¹ These pollutants are carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), and sulfur dioxide (SO₂).⁴² The CAA identifies two different air quality standards: a primary standard, for the protection of human health, and a secondary standard, for the protection of public welfare.⁴³ In order for a pollutant to be deemed a criteria pollutant, its emission must “cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare.”⁴⁴

The EPA has not made a finding that CAFO emissions can “reasonably be anticipated to endanger public health or welfare.”⁴⁵ Thus, the agency has not established NAAQS for air emissions from CAFOs.⁴⁶ Further, the EPA has refused to grant a 2009 petition, filed by The Humane Society of the United States and other environmental groups, to list CAFOs under section 111 of the CAA, which sets emission standards for stationary sources that significantly “endanger public health or welfare.”⁴⁷ The EPA acknowledged that livestock are potential sources of air

³⁸ *Id.*

³⁹ Emergency Release Notification Regulations on Reporting Exemption for Air Emissions From Animal Waste at Farms; Emergency Planning and Community Right-to-Know Act, 83 Fed. Reg. 220 (proposed Nov. 14, 2018) (to be codified at 40 C.F.R. pt. 355).

⁴⁰ EPA, *supra* note 33.

⁴¹ EPA, *supra* note 18.

⁴² *NAAQS Table*, EPA, <https://www.epa.gov/criteria-air-pollutants/naaqs-table> [<https://perma.cc/G7TH-PKDT>] (last updated Dec. 20, 2016).

⁴³ *Id.*

⁴⁴ 42 U.S.C. § 7408(a)(1) (2012).

⁴⁵ *Clean Air Act Does Not Require EPA to Regulate Emissions From Animal Feeding Operations*, TAFT L. (July 17, 2014), <https://www.taftlaw.com/news-events/law-bulletins/clean-air-act-does-not-require-epa-to-regulate-emissions-from-animal-feeding-operations> [<https://perma.cc/B474-G9K6>].

⁴⁶ *Id.*

⁴⁷ 42 U.S.C. § 7408(a)(1) (2012); *EPA puts CAFO emission measurement reg on hold*, CAPITAL PRESS (Jan. 4, 2018), <http://www.capitalpress.com/20180104/epa-puts-cafo-emission-measurement-reg-on-hold> [<https://perma.cc/R8KJ-YQLZ>].

pollutants, but claimed that regulating emissions of these pollutants under the CAA is not justified because there is no reliable method to measure these emissions.⁴⁸ A citizen suit brought by residents of Winneshiek County, Iowa, in which they argued that the EPA has a “nondiscretionary duty” under the CAA to regulate CAFO emissions, has also been unsuccessful.⁴⁹ Thus, there is no targeted regulation of CAFO emissions under the CAA.⁵⁰

B. State Laws

Certain states have enacted additional regulations that go beyond the few federal requirements placed on the operation of CAFOs.⁵¹ Several states regulate CAFO-related odors, which are not expressly regulated by federal law.⁵² Seven states (Alabama, Missouri, Nebraska, Oklahoma, Oregon, Pennsylvania, and Texas) require CAFO operators to identify sources of odors and submit an odor management or control plan.⁵³ Some of these states also require the implementation of BMPs to minimize or eliminate these odors.⁵⁴

While all NPDES permits must include an NMP,⁵⁵ federal NMPs are not required to address issues unique to CAFOs, such as odor.⁵⁶ However, Idaho and North Dakota require CAFOs to consider the effects of their operations on odor when drafting their NMPs for their NPDES permit applications.⁵⁷ Additionally, several states impose requirements on CAFO operators to develop waste management plans (“WMPs”), pollution prevention plans (“PPPs”), or obtain air quality permits (“AQPs”) to expressly address odor minimization.⁵⁸

⁴⁸ CAPITAL PRESS, *supra* note 47.

⁴⁹ *Zook v. McCarthy*, 52 F. Supp. 3d 69, 71 (D.D.C. 2014) (ruling that the EPA only has a discretionary duty under the CAA to regulate CAFO emissions).

⁵⁰ See CAPITAL PRESS, *supra* note 47.

⁵¹ See generally OFF. FOR STATE, TRIBAL, LOCAL & TERRITORIAL SUPPORT, CDC, MENU OF STATE LAWS REGARDING ODORS PRODUCED BY CONCENTRATED ANIMAL FEEDING OPERATIONS (Jan. 21, 2016), <https://www.cdc.gov/phlp/docs/menu-environmentalodors.pdf> [<https://perma.cc/DMU6-YCX9>] (detailing several state laws for the regulation of CAFOs).

⁵² See *id.*

⁵³ *Id.* at 2, 5.

⁵⁴ *Id.* at 2.

⁵⁵ 40 C.F.R. § 122.42(e)(1) (2012).

⁵⁶ See § 122.23(h).

⁵⁷ OFF. FOR STATE, TRIBAL, LOCAL & TERRITORIAL SUPPORT, CDC, *supra* note 51, at 2–3.

⁵⁸ For example, Oklahoma and Alabama require CAFOs to consider odor prevention in WMPs, Texas requires CAFOs to obtain AQPs, and Oklahoma and Texas require CAFOs to address odor in PPPs. *Id.* at 3.

Several states have also placed more stringent effluent limits on CAFOs than required by federal regulations.⁵⁹ Many states also impose limitations on the land application of waste, which is the primary mechanism of waste disposal for CAFOs.⁶⁰ Under an NPDES permit, the rate of land application of solid animal waste—known as the agronomic rate—is typically determined based on the nitrogen needs of crops.⁶¹ Forty states require that solid waste from CAFOs be applied at this agronomic rate.⁶² Thirty-eight states require the development and use of WMPs,⁶³ though not all require consideration of odor while developing these plans.⁶⁴ One state, Georgia, requires a land application system (“LAS”) permit.⁶⁵ This type of permit prohibits discharge to surface water, and requires ground water and soil monitoring, as well as quarterly reporting.⁶⁶

Many states also require that all CAFOs, or at least a larger subset of CAFOs than is required by federal law, obtain NPDES permits.⁶⁷ For example, Arkansas requires that all animal feeding operations—of which CAFOs are a subset—that use a liquid waste management system obtain a permit.⁶⁸ Some states have required that large farms that have even the *potential* to discharge waste must obtain permits.⁶⁹ Therefore, this permitting requirement reaches further than the NPDES permitting requirements under the CWA, which only address CAFOs that have discharged or expect to discharge animal waste.⁷⁰

Some states regulate certain chemical discharges more strictly than under federal law. For example, Arizona requires that all CAFOs harvest and dispose of manure in a way that minimizes the discharge of nitrogen pollutants through runoff or leaching.⁷¹ Further, certain states, such as

⁵⁹ Arkansas, for example, does not allow any effluent discharges. EPA, PROGRAMS AND REGULATORY ACTIVITIES RELATED TO ANIMAL FEEDING OPERATIONS—COMPENDIUM OF STATE AFO PROGRAMS 13 (May 2002), <https://www3.epa.gov/npdes/pubs/statecom.pdf> [<https://perma.cc/ZMP4-URMS>].

⁶⁰ *See id.*

⁶¹ *Id.*

⁶² *Id.*

⁶³ *Id.*

⁶⁴ *See* OFF. FOR STATE, TRIBAL, LOCAL & TERRITORIAL SUPPORT, CDC, *supra* note 51, at 3.

⁶⁵ EPA, *supra* note 59, at 72.

⁶⁶ *Id.* at 73.

⁶⁷ *See id.* at 11.

⁶⁸ *Id.*

⁶⁹ *Id.*; *see also* Amanda Peterka, *Agriculture: States Struggle to Regulate Factory Farms*, FRONTIERGROUP (Feb. 23, 2011), <https://frontiergroup.org/media/fg/agriculture-states-struggle-regulate-factory-farms> [<https://perma.cc/ZL73-K7LA>].

⁷⁰ EPA, *supra* note 19.

⁷¹ EPA, *supra* note 59, at 25.

Arizona, Florida, Idaho, and Iowa, also have specific provisions that extend this care to groundwater, which is typically not regulated by the federal CWA.⁷²

Despite numerous state regulations that extend beyond the requirements of the federal NPDES permitting system, enforcement of state regulations is still lacking.⁷³ Additionally, almost no state—except Texas, which requires CAFOs to obtain AQPs—imposes air quality controls on CAFOs.⁷⁴ Therefore, air pollution caused by CAFOs is essentially left unregulated.

II. SECONDARY LAWS AND CONCERNS THAT EXACERBATE THE LACK OF REGULATION OF CAFOs

A. *Right-to-Farm Laws*

All fifty states have enacted right-to-farm laws that protect farmers from nuisance lawsuits brought by community members who move to areas near farming operations after these operations have commenced.⁷⁵ While these laws were initially introduced in the 1970s and '80s to protect farming operations from rapid urbanization, today these laws vary in their scope.⁷⁶ These laws often prohibit local governments from enacting stricter agricultural regulations than state minimums.⁷⁷ They also restrict the ability of residents who live near agricultural operations to sue those operations even if there is a significant impact on water or air quality, especially if those farm operations are conducting “generally accepted agricultural management practices.”⁷⁸ Some laws

⁷² ENVTL. LAW INST., STATE CONSTRAINTS: STATE-IMPOSED LIMITATIONS ON THE AUTHORITY OF AGENCIES TO REGULATE WATERS BEYOND THE SCOPE OF THE FEDERAL CLEAN WATER ACT 12 (May 2013).

⁷³ See generally EPA, *supra* note 59, at 11–13.

⁷⁴ UNITED SOYBEAN BOARD, ENVIRONMENTAL AUDIT OF ANIMAL AGRICULTURE 43 (2015).

⁷⁵ Alexandra Limalo & Elizabeth Rumley, *States' Right-To-Farm Statutes*, NAT'L AGRIC. L. CTR., <http://nationalaglawcenter.org/state-compilations/right-to-farm/> [<https://perma.cc/9TQP-NP9Q>] (last visited Nov. 12, 2019).

⁷⁶ See John Ikerd, *CAFOs or Communities: A Time of Decision* (July 26, 2014) (unpublished conference paper), available at <http://web.missouri.edu/ikerdj/papers/IndianaCAFOWatch2014.pdf> [<https://perma.cc/KK5C-YLNS>].

⁷⁷ *Oppose “Right to Farm” Legislation*, AM. SOC'Y FOR PREVENTION CRUELTY TO ANIMALS, <https://www.asPCA.org/animal-protection/public-policy/oppose-right-farm-legislation> [<https://perma.cc/SU4F-KX4K>] (last visited Nov. 12, 2019); see ALA. CODE § 6-5-127 (1975); KY. REV. STAT. ANN. § 413.072 (2010).

⁷⁸ AM. SOC'Y FOR PREVENTION CRUELTY TO ANIMALS, *supra* note 77; see IOWA CODE § 657.11 (2014); MICH. COMP. LAWS § 286.473 (1995).

even require that plaintiffs pay legal fees to the agricultural entity if the suit is unsuccessful.⁷⁹

Whether through express terms or through their deterrent effects, these laws do a great deal to protect large animal agriculture operations such as CAFOs from suits by residents of communities who surround these operations.⁸⁰ In recent years, several states have attempted to pass right-to-farm amendments to their state constitutions.⁸¹ This not only grants agricultural operations a constitutional right to farm, it also severely reduces the protections available to potential plaintiffs in nuisance suits.⁸²

B. *Ag-Gag Laws*

Ag-gag laws, as they are colloquially known, are essentially the anti-whistle-blower laws of the industrial animal agriculture realm.⁸³ As concerns about the animal agriculture industry grew, especially among animal protection and animal rights organizations, many of these organizations began conducting undercover investigations.⁸⁴ Although the motivation of these investigations has typically been to expose the cruel and illegal practices of many large scale industrial farms with an eye toward animal welfare, these investigations often produce evidence that shows illegal environmental activity as well.⁸⁵ Although there has not been any federal response to these undercover investigations, several states responded by introducing ag-gag laws.⁸⁶ These laws sought to prohibit or restrict the ability of undercover investigators to: (1) seek entry onto the premises of factory farms and/or (2) record and distribute any audio or video of the operations of these factory farms.⁸⁷

Litigation and legislation across the country have yielded a variety of results.⁸⁸ Four states have declared ag-gag laws unconstitutional,

⁷⁹ AM. SOC'Y FOR PREVENTION CRUELTY TO ANIMALS, *supra* note 77; see 740 ILL. COMP. STAT. 70/4.5 (1996); WIS. STAT. § 823.08 (2009).

⁸⁰ Ikerd, *supra* note 76.

⁸¹ AM. SOC'Y FOR PREVENTION CRUELTY TO ANIMALS, *supra* note 77.

⁸² *Id.*

⁸³ Alicia Prygoski, *Brief Summary of Ag-gag Laws*, MICH. STATE UNIV. C. LAW (2015), <https://www.animallaw.info/article/brief-summary-ag-gag-laws> [<https://perma.cc/FN49-NQEV>].

⁸⁴ *Id.*

⁸⁵ See *What is Ag-Gag?*, LAST CHANCE FOR ANIMALS, <https://www.lcanimal.org/index.php/campaigns/ag-gag-laws-states-of-disgrace/what-is-ag-gag> [<https://perma.cc/7456-BT6Y>] (last visited Nov. 12, 2019).

⁸⁶ Prygoski, *supra* note 83.

⁸⁷ *Id.*

⁸⁸ *What Is Ag-Gag Legislation?*, AM. SOC'Y FOR PREVENTION CRUELTY TO ANIMALS, <https://>

seventeen state legislatures have failed to pass ag-gag laws, and six states have criminalized whistle-blowing of farms.⁸⁹ Ag-gag laws, in states where they have been successfully introduced, can limit the public's ability to hold large scale animal agriculture farms accountable for the environmental harms that stem from the operation of these facilities.

C. *Lobbying Efforts by the Agriculture Industry*

The animal agriculture industry has spent millions of dollars in lobbying to persuade both the federal and state legislatures to pass money-saving and/or disclosure-reducing legislation.⁹⁰ In 2018 alone, Tyson Foods, a big name in the meat processing industry, spent over \$1.1 million on lobbying efforts.⁹¹ That same year, the dairy industry spent close to \$7.5 million, the livestock industry close to \$4 million, and the eggs and poultry industry close to \$2 million.⁹² These industries have lobbied heavily in favor of ag-gag legislation and exemptions from Freedom of Information Act ("FOIA") requests.⁹³

These lobbying efforts have enormous results, as is apparent from the approval of an \$867 billion farm bill in 2018.⁹⁴ The 2018 Farm Bill, which was signed into law by President Trump on December 20, 2018, "widens loopholes" and allows the biggest and wealthiest companies—many of which operate several large-scale animal agriculture farms such as CAFOs—to obtain the largest subsidies.⁹⁵ This is not a new development. Rather, the top 10 percent of farms have accounted for 77 percent of commodity subsidies over the last twenty-two years.⁹⁶ This has amounted

www.aspc.org/animal-protection/public-policy/what-ag-gag-legislation [<https://perma.cc/R3W8-99LP>] (last visited Nov. 12, 2019).

⁸⁹ *Id.*

⁹⁰ *Agribusiness Sector Profile, 2018*, CTR. FOR RESPONSIVE POLITICS, <https://www.opensecrets.org/lobby/indus.php?id=A> [<https://perma.cc/VUS9-DDDF>].

⁹¹ *Food Processing & Sales Industry Profile: Summary, 2018*, CTR. FOR RESPONSIVE POLITICS, <https://www.opensecrets.org/lobby/indusclient.php?id=A09&year=2018> [<https://perma.cc/9TMM-3FSG>].

⁹² CTR. FOR RESPONSIVE POLITICS, *supra* note 90.

⁹³ Nancy Fink Huehnergath, *Big Agriculture Bullies and Lobbies To Keep Americans In The Dark*, FORBES (May 5, 2016), <https://www.forbes.com/sites/nancyhuehnergath/2016/05/05/big-ag-bullies-and-lobbies-to-keep-americans-in-the-dark/#161f97fa502c> [<https://perma.cc/7TTH-QPGP>].

⁹⁴ *What's in the 2018 Farm Bill? The Good, The Bad and The Offal . . .*, FARM AID (Dec. 20, 2018), <https://www.farmaid.org/issues/farm-policy/whats-in-the-2018-farm-bill-the-good-the-bad-and-the-offal/> [<https://perma.cc/6MAC-FATE>].

⁹⁵ *Id.*

⁹⁶ Karl Evers-Hillstrom, *Farm Bill's corporate farm subsidies remain intact after extensive*

to a total of \$158 billion in taxpayer-funded subsidies.⁹⁷ The massive tax breaks that large farms enjoy operate as incentives to continue business as usual, without taking into consideration the environmental impacts of day-to-day operations.

D. *Enforcement Failures*

The EPA conducts inspections of CAFOs for any of the following reasons:

[A] routine inspection, to follow up on a citizen tip or complaint, for case development support after a violation has been identified, for a follow-up inspection to ensure that the permittee has implemented required controls or best management practices[, or for a] compliance inspection to ensure compliance with settlement requirements.⁹⁸

In 2011, the EPA's Office of Enforcement and Compliance Assurance ("OECA") first published a list of National Enforcement Initiatives, "an inventory of the agency's highest-priority pollution problems."⁹⁹ This designates "enforcement and compliance resources" to some of the "most serious environmental violations."¹⁰⁰ The EPA included preventing animal waste from contaminating surface and ground water on this list in 2011 and 2014.¹⁰¹ When the inventory was renamed the National Compliance Initiatives ("NCIs"), apparently to better convey the "overarching goal of increased compliance and the use of not only enforcement actions, but the full range of compliance assurance tools," animal waste was one of the eight NCIs listed for the 2017–2019 cycle.¹⁰²

lobbying, CTR. FOR RESPONSIVE POLITICS (Dec. 14, 2018), <https://www.opensecrets.org/news/2018/12/farm-bill-corporate-farm-subsidies-intact-after-lobbying/> [<https://perma.cc/7A86-H8BS>]; *Commodity subsidies in the United States totaled \$217.5 billion from 1995–2019*, EWG, <https://farm.ewg.org/progdetail.php?fips=00000&progcode=totalfarm&page=conc®ionname=theUnitedStates> [<https://perma.cc/445Z-BBAB>] (last visited Nov. 12, 2019).

⁹⁷ Evers-Hillstrom, *supra* note 96.

⁹⁸ *Inspections of Concentrated Animals Feeding Operations*, EPA, <https://www.epa.gov/compliance/inspections-concentrated-animal-feeding-operations> [<https://perma.cc/M2MA-JQQW>] (last updated Oct. 19, 2016).

⁹⁹ Brett Walton, *Preventing CAFO Water Pollution Not An EPA Priority*, CIRCLE BLUE (Jan. 22, 2016), <https://www.circleofblue.org/2016/world/67739/> [<https://perma.cc/DE2F-2QR7>].

¹⁰⁰ *National Compliance Initiatives*, EPA, <https://www.epa.gov/enforcement/national-compliance-initiatives> [<https://perma.cc/4BNY-D9VV>] (last updated Sept. 10, 2018).

¹⁰¹ Walton, *supra* note 99.

¹⁰² EPA, *supra* note 100.

However, EPA inspections of CAFOs are neither consistent from year to year nor are they adequate. In recent years, EPA inspections of CAFOs have dropped significantly.¹⁰³ There were 291 inspections in 2012 but just 109 inspections in 2018.¹⁰⁴ These numbers include both federal-only inspections and federally led inspections with state participation.¹⁰⁵ A mere eighteen of the 109 CAFOs inspected in 2018 were subject to any type of enforcement action.¹⁰⁶

Despite the fact that “nearly 60,000 miles of U.S. streams are classified as impaired” due to animal feeding operations,¹⁰⁷ only 6,591 of the 19,961 CAFOs across the United States held NPDES permits in 2017.¹⁰⁸ Since CAFOs that do not discharge into the navigable waters of the United States are not subject to the NPDES permitting provisions of the Clean Water Act, not all CAFOs must necessarily hold NPDES permits.¹⁰⁹ However, it is not unreasonable to believe that more than 33 percent of *all* CAFOs across the country are subject to NPDES permits. Unfortunately, given the scarcity of inspections conducted by the EPA, it is likely that many CAFOs that should obtain NPDES permits are simply not doing so, and those CAFOs that have obtained the required permits may not adhere to its requirements because of the lack of enforcement.

III. THE PROBLEM: THE ADVERSE EFFECTS OF CAFOS

Animal agriculture is one of the leading causes of a multitude of the environmental issues that plague our planet, including climate change, deforestation, water use, land use, and marine biodiversity loss.¹¹⁰ CAFOs are especially lethal to our land and water resources.¹¹¹ Given that CAFOs have enormous potential to cause irreversible harm to our environment,

¹⁰³ *National Compliance Initiative: Preventing Animal Waste from Contaminating Surface and Ground Water*, EPA, <https://www.epa.gov/enforcement/national-compliance-initiative-preventing-animal-waste-contaminating-surface-and-ground> [https://perma.cc/P4ZJ-PKSQ] (last visited Nov. 12, 2019).

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ Walton, *supra* note 99.

¹⁰⁸ *NPDES CAFO Permitting Status Report—National Summary, Endyear 2017*, EPA (2017), https://www.epa.gov/sites/production/files/2018-05/documents/tracksum_endyear_2017.pdf [https://perma.cc/9NP9-6FET].

¹⁰⁹ See 33 U.S.C. § 1362.

¹¹⁰ Haley Hansel, *How Animal Agriculture Affects Our Planet*, PACHAMAMA ALLIANCE (Feb. 2, 2018), <https://blog.pachamama.org/how-animal-agriculture-affects-our-planet> [https://perma.cc/D37M-6GDT].

¹¹¹ *Id.*

the sprinkling of laws currently on the books that regulate CAFOs are wholly inadequate. Aside from environmental concerns, there are major health, environmental justice, animal welfare, and economic market failure concerns associated with CAFOs.¹¹²

Raising animals in such close quarters and subjecting them to brutal living conditions and methods of slaughter not only pose a myriad of animal welfare concerns,¹¹³ but this practice also endangers human health.¹¹⁴ Studies have shown that a large percentage of factory farm workers suffer from some type of respiratory illness, with a staggering 70 percent occurrence of such illness among swine operation workers.¹¹⁵ These workers often also suffer from mental illness because of the emotionally exhausting nature of the work.¹¹⁶ Further, the animal agriculture industry seeks rural, often poor communities to build their CAFOs in because citizens do not have the numbers or means to block these operations.¹¹⁷ Many towns allow these operations in the hopes that the operations' revenue earning potential will bring in money for the community and revitalize the town.¹¹⁸ While the town may reap some benefits, community members suffer a diminished standard of living due to the water, air, noise, and odor pollution that surrounds any large animal agriculture operation.¹¹⁹

Aside from the significant adverse health effects of CAFOs, lobbying efforts by the animal agriculture industry often lead to the types of tax breaks and subsidies that were part of the 2018 Farm Bill.¹²⁰ Due to these extensive lobbying efforts, as well as tax breaks and subsidies, the true costs of CAFOs are not accounted for in the price that consumers of animal products pay. Instead, these externalized costs of CAFOs are

¹¹² See generally Carrie Hribar, *Understanding Concentrated Animal Feeding Operations and Their Impact on Communities*, NAT'L ASS'N LOCAL BOARDS HEALTH (Mark Schultz ed., 2010), https://www.cdc.gov/nceh/ehs/docs/understanding_cafos_nalboh.pdf [<https://perma.cc/Z5V3-D77Z>] (discussing the environmental, health, and economic effects of CAFOs).

¹¹³ ANIMAL WELFARE INST., *supra* note 2.

¹¹⁴ See generally Hribar, *supra* note 112 (discussing several adverse health effects associated with large scale animal feeding operations).

¹¹⁵ *Livestock Confinement Dusts And Gases*, IOWA ST. UNIV. (June 1992), http://nasdonline.org/static_content/documents/1620/d001501.pdf [<https://perma.cc/VVQ5-QNRU>].

¹¹⁶ *Id.*

¹¹⁷ GURIAN-SHERMAN, *supra* note 6, at 5.

¹¹⁸ Wendee Nicole, *CAFOs and Environmental Justice: The Case of North Carolina*, 121 ENVTL. HEALTH PERSPECTIVES 182, 183 (2013).

¹¹⁹ See generally Hribar, *supra* note 112 (discussing several adverse health effects associated with large scale animal feeding operations).

¹²⁰ See *supra* Section II.C.

shifted onto the public.¹²¹ In addition to these economic costs, certain vulnerable members of the public will pay for CAFOs in something that is arguably more valuable than money—their quality of life.¹²² Though there is still debate about whether large animal feeding operations are sited in poor and disadvantaged localities, or whether communities change for the worse after these operations move to a given location, those with the means to leave these areas tend to do so.¹²³ Those that are left do not have the means to uproot their lives,¹²⁴ and are persistently affected by the odors, sounds, and diminished water quality due to large animal agriculture operations such as CAFOs.¹²⁵ Successful lobbying by the industry makes it nearly impossible to prevent CAFOs from taking root in such communities.

IV. REVAMPING THE ROLE OF FEDERALISM AS IT APPLIES TO THE REGULATION OF CAFOs IN ORDER TO ADDRESS RISING ENVIRONMENTAL, HEALTH, SOCIAL JUSTICE, AND ANIMAL WELFARE CONCERNS

A. *The Federal Government Should Prioritize the Enforcement of Legislation and Regulations of CAFOs and Reexamine Its Regional Enforcement Procedures*

The EPA must be more diligent in enforcing the few existing federal laws concerning CAFOs. While states have the right to petition the EPA to grant them the authority to administer their own NPDES permitting programs, the EPA also has the right to rescind this authority.¹²⁶ Regulations allow citizens to petition the EPA to rescind the authority of states to administer NPDES permits.¹²⁷ Between 1989 and 2017, twelve

¹²¹ GURIAN-SHERMAN, *supra* note 6, at 5–6.

¹²² See Julia Lenhardt & Yelena Ogneva-Himmelberger, *Environmental Injustice in the Spatial Distribution of Concentrated Animal Feeding Operations in Ohio*, 6 ENVTL. JUSTICE 133, 134 (2013); Nicole, *supra* note 118, at 183, 187 (discussing the everyday environmental injustices that residents of poor, rural communities in North Carolina and Ohio must endure).

¹²³ Nicole, *supra* note 118, at 183.

¹²⁴ *Id.*

¹²⁵ See generally Lenhardt & Ogneva-Himmelberger, *supra* note 122; Nicole, *supra* note 118 (discussing the adverse effects on air and water quality that residents of communities close to large scale animal agriculture operations must live with).

¹²⁶ See 33 U.S.C. § 1342.

¹²⁷ 40 C.F.R. § 123.64(b); see EPA, *supra* note 31.

of the forty-nine citizen petitions submitted to the EPA were initiated, fully or in part, because of certain states' inability to regulate CAFOs as required by the CWA.¹²⁸ Yet, all of the petitions that have been resolved as of February 2019 were denied or partially denied.¹²⁹ Several of the petitions were denied on the grounds that the states in question took corrective action after the petition was filed with the EPA and thus there remained no grounds to rescind the states' permitting authority.¹³⁰

While regulations that allow citizens to petition the EPA are powerful in that they force the EPA to thoroughly investigate allegations that states are not adhering to the CWA and provisions of their Memorandum of Agreement, these investigations are few and far between.¹³¹ The EPA also seems reluctant to rescind a state's authority to administer NPDES permits if the state takes corrective action.¹³² To avoid such fruitless investigations following a petition, the EPA must proactively enforce the provisions under which it granted states the authority to handle the NPDES permitting program—preferably, before a petition is even filed.

There is some evidence of a relationship between the states in which citizens have petitioned the EPA to rescind the states' authority to grant NPDES permits and the states in which citizen suits are filed in order to enforce regulations dealing with CAFOs.¹³³ This pattern suggests that citizens, often environmental groups or coalitions, will exhaust all means possible to force state or federal authorities to uphold the law.¹³⁴ In-depth, multi-year investigations and lawsuits can be more costly than

¹²⁸ The EPA makes publically available all state program withdrawal petitions and other documents involved in the proceedings. See EPA, *supra* note 31.

¹²⁹ *Id.*

¹³⁰ *Id.* (detailing causes of denial of state program withdrawal petitions under the “Withdrawal Petitions” tab).

¹³¹ See OFFICE OF INSPECTOR GEN., EPA, EPA MUST IMPROVE OVERSIGHT OF STATE ENFORCEMENT (Dec. 9, 2011), <https://www.epa.gov/sites/production/files/2015-10/documents/20111209-12-p-01113.pdf> [<https://perma.cc/F8NT-WFNK>] (claiming that the “EPA does not administer a consistent national enforcement program”).

¹³² See EPA, *supra* note 31.

¹³³ Farming states such as Iowa, Illinois, and Wisconsin have each been subject to a state NPDES program withdrawal petition submitted by citizens or citizen groups. See *id.*; see also Steven M. Sellers, *As Factory Farms Spread, So Do Toxic Tort Cases*, BLOOMBERG BUREAU NAT'L AFF. (May 5, 2017), <https://news.bloombergenvironment.com/environment-and-energy/as-factory-farms-spread-so-do-toxic-tort-cases?context=article-related> [<https://perma.cc/SNK8-P5D6>].

¹³⁴ See generally James R. May, *The Availability of State Environmental Citizen Suits*, 18 NAT. RESOURCES & ENV'T 53 (2004) (discussing the growth of the use of federal and state environmental citizen suits).

regular enforcement of environmental laws.¹³⁵ As citizen suits become more commonplace, it will be more cost effective for the EPA to conduct regular inspections and enforcement checks on CAFOs. The regional EPA offices, which are in charge of enforcing federal laws in states within the region, may also be incentivized to conduct regular inspections through favorable funding allocations.

Though the EPA's OECA continues to designate water contamination from animal waste as a National Compliance Initiative ("NCI"),¹³⁶ the annual number of EPA inspections of CAFOs and concluded enforcement actions has decreased significantly in recent years.¹³⁷ And, while preventing animal waste from water contamination has historically been a national priority of the NCI program, the OECA has announced that it has removed this NCI from the priority list for the 2019 fiscal year.¹³⁸ Given that enforcement efforts have decreased quite drastically over the past several years—even though water contamination from animal waste was listed as an NCI—it is likely that removing this NCI from the priority list will deter the EPA even further, leading to even fewer inspections.

The majority of CAFO inspection and enforcement actions from 2008 to 2018 took place in Iowa, Texas, Pennsylvania, and New York.¹³⁹ While these states do have a large number of CAFOs, and specifically CAFOs with NPDES permits,¹⁴⁰ many other states—Minnesota (which has the highest number of CAFOs with NPDES permits in the country), California, Maryland, and Nebraska, for example—which have just as many, if not more, CAFOs within the state¹⁴¹ were subject to very few inspections over ten years.¹⁴² This could be due to a range of factors: (1) the EPA may have decided to concentrate its efforts on a few known miscreant facilities, (2) there may have been specific complaints against the facilities in the states that saw the most frequent inspection and enforcement actions, or (3) there was disagreement with the states about conducting inspections.

¹³⁵ See generally *id.*; Jared Marx, *Litigation and Settlement Basics: The Litigation Life Cycle*, CONSTRUCTION EXECUTIVE (Dec. 12, 2017), <https://constructionexec.com/article/litigation-and-settlement-basics-the-litigation-lifecycle> [<https://perma.cc/SUG5-N7TY>].

¹³⁶ EPA, *supra* note 100.

¹³⁷ EPA, *supra* note 103.

¹³⁸ *Id.*

¹³⁹ *Id.*

¹⁴⁰ EPA, *supra* note 108.

¹⁴¹ *Id.*

¹⁴² EPA, *supra* note 103.

Establishing a cross-regional accountability system may help encourage more uniform and frequent inspections of CAFOs at the federal level. The different EPA regions¹⁴³ may think about teaming up with all or some of the other regions to create an “inter-region compact.” Interstate compacts, which are agreements between two or more states in which they adopt certain standards or agree to cooperate on a certain law or regulation, have been used in the legislative realm for several decades.¹⁴⁴ Drawing inspiration from such compacts, the EPA may establish inter-region compacts to hold each region accountable for conducting inspections of CAFOs. Though these compacts need not be, and likely could not be, contracts in the same way as interstate compacts usually are, the idea that one region can hold another region accountable is powerful. Such compacts may allocate funds based on what actions a region takes towards improving the number of inspections they conduct. These actions might include reaching out to the state authorities who are authorized to implement NPDES permitting systems to schedule inspections, seriously considering any and all reports against a facility from within the EPA or from the public, and keeping accurate and up-to-date inspection and enforcement records. An important feature of this compact would be the reporting requirements. Each region would need to keep accurate records of all the actions they have taken in order to demonstrate to other regions that they have been taking the necessary actions.

Limited funds for such inspections and reporting are the biggest hurdle to this inter-region compact. The EPA would not only have to designate resources and personnel time to establish this compact in the first place, which is likely to be a mammoth task on its own, but each region would also be required to designate resources in order to uphold the provisions of the compact. Bearing these prohibitions in mind, such a compact is not meant to recreate the system. Rather, in the face of limited resources and more lenient federal laws and regulations,¹⁴⁵ it is meant to establish a system of accountability within the EPA that will hopefully yield improved inspection and enforcement numbers.

¹⁴³ *Visiting a Regional Office*, EPA, <https://www.epa.gov/aboutepa/visiting-regional-office> [<https://perma.cc/2PBD-E8P9>] (last updated June 14, 2018).

¹⁴⁴ *Understanding Interstate Compacts*, COUNCIL ST. GOV'TS—NAT'L CTR. FOR INTERSTATE COMPACTS, http://www.gsgp.org/media/1313/understanding_interstate_compacts-csgncic.pdf [<https://perma.cc/NAH7-MTTK>] (last visited Nov. 12, 2019).

¹⁴⁵ See *supra* Section II.A (discussing the lack of regulation of CAFOs under federal legislation).

B. States Should Administer Permitting Programs That Are More Stringent than the Current NPDES Program and Establish a Permit System That Addresses Air Pollution Due to CAFO Emissions

Against a meager federal backdrop, states have to shoulder the responsibility of picking up the environmental slack. Because limited funds and resources may prohibit a significant increase in inspections and enforcement actions under a federal inter-region compact, state legislatures and agencies must take advantage of their ability to impose additional requirements on CAFOs. While it may be the case that a single state agency controls the implementation and enforcement of regulations regarding CAFOs, sometimes this responsibility is delegated to more than one state agency.¹⁴⁶ In this case, a cross-agency accountability system, similar to the inter-region compact at the federal level, may incentivize these agencies to work together better. States are also more likely to be motivated to enact stricter laws, given that they are more directly impacted by the activities that occur at CAFOs within the state. It is often easier for individuals to reach their state governments than to reach the federal government, so state governments will most directly interact with those adversely affected by CAFOs.

Since states are in the best position to understand the needs of their communities, states are best able to decide what type of CAFO regulations, in addition to federal regulations, these communities would most benefit from. Each state should administer an NPDES permitting program that requires CAFOs to satisfy all of the federal NPDES requirements, and each state should also administer its own non-NPDES permitting program that imposes additional restrictions on CAFOs. This program should require CAFOs to submit a waste management plan that limits land application of waste and adheres to specific storage methods,¹⁴⁷ submit an odor management plan that identifies all of the potential sources of odors and details a procedure to manage these odors,¹⁴⁸ and obtain an air quality permit that determines the acceptable quantities and types of air pollutants.¹⁴⁹ Additionally, state legislatures should revisit ambiguous terminology in many state right-to-farm laws and codify definitions, so that large

¹⁴⁶ See OFFICE OF INSPECTOR GEN., EPA, *supra* note 131, at 2.

¹⁴⁷ See EPA, *supra* note 59, at 11.

¹⁴⁸ See OFF. FOR STATE, TRIBAL, LOCAL & TERRITORIAL SUPPORT, CDC, *supra* note 51, at 1–2.

¹⁴⁹ *Id.* at 2–3.

agricultural farms such as CAFOs do not continue to use these laws to conduct operations that adversely affect the community.¹⁵⁰

Additionally, given that factory farms are no longer required to report air emissions under CERCLA and this exemption for reporting air emissions from animal waste at farms also applies to EPCRA,¹⁵¹ there will be no federal emergency response to hazardous substance releases on factory farms. States should introduce legislation that requires state agencies to respond to such emergency releases on CAFOs within the state. Many state environmental agencies already have emergency management departments,¹⁵² so such legislation would not involve creating a system from scratch.

CONCLUSION

Concentrated animal feeding operations are large scale animal agriculture operations that produce more than 50 percent of the animals that are slaughtered for food in the United States.¹⁵³ CAFOs are not adequately regulated under existing federal laws; in fact, they are sometimes expressly exempt from regulation. Yet, they produce devastating effects on water and air quality, impose adverse health effects on workers, and significantly reduce the quality of life of the residents of the areas surrounding the facility. Many such residents have little recourse against large scale animal facilities due to right-to-farm laws that often prohibit residents from successfully bringing nuisance suits. Other members of the public, specifically environmental advocacy groups, may also be hindered in their efforts to fight against these facilities due to the adoption of ag-gag laws by several states.

Thus, enforcement of existing laws and promulgation of more stringent legislation is the most effective way to regulate CAFOs. The EPA may try to incentivize more frequent inspection and enforcement actions

¹⁵⁰ See *supra* Section II.A.

¹⁵¹ EPA, *supra* note 33.

¹⁵² See, e.g., *Emergency Management Program*, N.J. DEP'T ENVTL. PROT., <https://www.nj.gov/dep/emergency/> [<https://perma.cc/3XNT-H8KT>] (last updated Jan. 9, 2019); *Emergency Preparedness*, IOWA DEP'T PUB. HEALTH, <https://idph.iowa.gov/Environmental-Health-Services/Emergency-Preparedness> [<https://perma.cc/56NA-NEM3>] (last visited Nov. 12, 2019); *VA Emergency Response & Planning Organizations*, VA. DEP'T ENVTL. QUALITY, <https://www.deq.virginia.gov/Programs/Air/AirQualityPlanningEmissions/SARATitleIII/VAEmergencyResponsePlanningOrganizations.aspx> [<https://perma.cc/NC2Y-34Z6>] (last visited Nov. 12, 2019).

¹⁵³ GURIAN-SHERMAN, *supra* note 6, at 2.

against CAFOs through an inter-region compact. Though the EPA may be able to improve inspection and enforcement numbers, states will bear the highest burden of regulating CAFOs where the federal government has failed to do so. States should implement higher NPDES permit standards than are required under the Clean Water Act, and they should additionally provide emergency services in the case of hazardous emissions from CAFOs within their state. These are not straightforward or quick solutions by any means, and issues regarding costs and politics will create hindrances to each of these proposed solutions. However, even an incremental change in any one of these proposed areas could provide a gain to an underprivileged group of people. This warrants consideration of change in the way concentrated animal feeding operations are regulated in the United States.